

# THE PLOTTER

CLACKAMAS COUNTY AREA T/S  
USERS GROUP  
NEWSLETTER

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VOLUME 3, NUMBER 3

EDITED BY: ROD GOWEN  
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## MEETING

The Feb. meeting of CCAT/S was not much of a meeting. As we did not have enough members present for a quorum, we did not have a business meeting but instead sat around and exchanged info and ideas. There were about 8 hearty souls who showed up despite the weather. We were sorry more could not make it, but we would not have wanted anyone to take any chances with snow or ice. We hope to see many of you at the March meeting. Because of not having a business meeting, we will not have our Secretary's Secrets column this issue.

Our March meeting will be held.

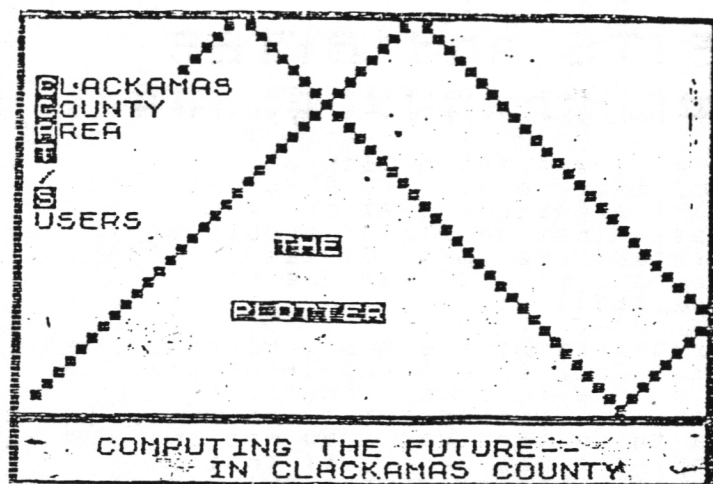
on: THURSDAY, MARCH 7th  
at: 7:30 P. M.  
in: COMMUNITY ROOM  
FAR WEST FEDERAL SAVINGS  
O. C. SHOPPING CENTER

## FROM THE CHAIRMAN'S COMPUTER--

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FROM THE CHAIRMAN'S COMPUTER  
DICK WAGNER

It is too bad that so many members missed the Feb. meeting. We had a good program lined up. Maybe part of it can be repeated later.



I had the pleasure of testing 2 programs at the meeting. Both by a Jr. member. Good games that should be shared by publishing in the PLOTTER.

I have successfully SAVED a copy of PENETRATOR on micro-drive and will show how it is done at a future meeting. My wife says that I only did it because it can't be done. Maybe she is right. But then my grandson will appreciate a 30+second loading time once the program starts. I also tailored it to delete the screen picture during loading.

I probably will miss the March meeting, must take a vacation now and then from retirement.

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## BITS and BYTES

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Here we are again with all the news that we have room for. If there are items that we have missed that you think should be printed here, why not let us know and we will let the world know about it.

\*As you know, the A & J Micro-drive 2000 is out and about and if the reviews mean anything, they are working out quite well. One thing that you may not know about the new drive, if that it is set up to receive a chip that adds a centronics parallel printer I/F to the drive I/F. The new kit is to be available the first week in March. If you have any questions about it, call your local authorized dealer, RMG Enterprises, 655-7484.

\*If any of you are now using the Spectrum ROM and have need of software for it, the best place to order these items is:

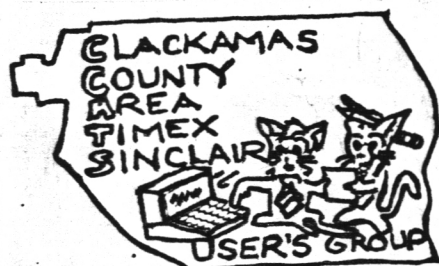
Curry Computer  
5344 Banff  
Glendale, AZ 85036  
(602)978-2902

They are good people and until your local dealer starts to carry these products, (See the ad elsewhere in this issue.)

\*For those of you who are hungry for as much information as you can get about T/S products and services should be aware that there is a lot of available info in the newsletter section of our library. These are there to be checked out for a week at a time for all paid-up members.

\*You are probably aware of the write-in campaign to Okidata regarding the Okimate 10 printer and how we might get them to produce an I/F for Timex computers. But, have you seen the new one? The Okimate 20. A letter quality, 100 color, 24 element print head, 240 word per minute, \$258 printer. (And still not for our machine!)

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\*Several of our members have ordered the Spectrum ROM chips from England. If anyone wants to order one or more parts and/or software for the Spectrum, please contact Rod Gowen at 655-7484. With an order for 6 chips, the cost per chip falls around \$10 each. That includes a share of the phone call and freight.

\*NOTE: Our mag and nl library now has an index. Our thanks to Dennis Jurries for his time and effort in getting this rather large task accomplished. If any of you have Profile 68 and would like a copy of the Index, bring your copy of Profile to the meeting and run a copy. If you want a hard copy, let us know and you may get one for the cost of the copy, about 20 cents.

\*If any of you have the Micro-drive and have run into any trouble converting your programs to run on wafer, just call Rod Gowen 655-7484 or Dick Wagner 266-4712. They will be glad to help.

\*Soon we will have the tape library indexed as the main library is now. Give us a little time.

\*We have heard that Executive Workshop, owned by our own Sec., Vince Lyon, has a new catalog out. Call him to see how to get your free copy. 771-8554

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## A NEAT TRICK

A TRICK FOR SAVING WITH T/S1000  
Dick Wagner

This suggestion is from the OCT. 1984 issue of the newsletter TIMELINEZ. CPT Charles R. Byler suggests this routine: for SAVEing auto-run MC programs just ENTER FAST and then RAND USR 836, and then PLAY to LOAD the tape. Ends with C/O. The program listing is displayed on ENTER so you can find the SAVE line. Copy to a new tape with GO TO line number and ENTER. RAND USR 836 initiates the LOAD command routine at Hex 344 in ROM. I tried this with Flight Simulator and it worked.

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# PRODUCT

## REVIEW

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### GESO 2068 CARTRIDGES

by Dennis Jurries

Bob Orrfelt has done wonders in his resurrection of the 2068 cartridge. While the programs on the two sample cartridges that I have tried are very simple they do demonstrate the use of the cartridge to store and use programs. Bob will soon, to my understanding, have a eeprom programmer available that will allow the user to load a basic program into their computer and thus program the eeprom. Loading of a program is as simple as inserting the cartridge into the cartridge port, turning on the computer, turning on the cartridge by throwing a switch, and pressing NEW and ENTER. The program is instantly loaded and running.

The switch on the cartridge is very handy if you wish to transfer the eeprom program into RAM and view it. To do this insert the cartridge making sure that it is switched in the off position. Turn on the computer and type in the following program (you can not enter any program lines while the eeprom is on or the eeprom has been RUN and stopped).

```
1 FOR n=32768 TO 40959
3 OUT 244,16: LET x=PEEK n
5 OUT 244,0: POKE (n+16384),x
7 NEXT n
8 STOP
10 FOR n=49151 TO 57343
20 LET x=PEEK n
25 IF n=49151 THEN PRINT x:: LET
n=n+2: GO TO 40
30 IF x=13 THEN PRINT : LET n=n+
2: PRINT PEEK n:: LET n=n+2
34 IF x=14 THEN LET n=n+5
38 IF x<>13 AND x<>14 AND x>5
AND x<>239 AND x<>20 THEN PRINT
CHR$ x;
40 NEXT n
```

Turn on the cartridge and RUN the program. The program will stop at line 8. Turn the cartridge off. Type GO TO 10 and ENTER. You will see the BASIC program that was on the cartridge (the line numbers may be in error due to something in the second half of the short program that you typed in).

To get your EPROM cartridges you can contact your local distributor or Bob Orrfelt at GESO PRODUCTS, 3436 Bay Road, Redwood City, CA 94063, telephone (415) 369-9136.

## FROM THE EDITOR'S DESK-

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We get quite a few newsletters each month and they are all worth looking at. However, a few stand out for both the quantity and the quality of their publications. We do not have the room here to name them all, but among the best are: ZX WORLD NEWS BULLETIN, L.I.S.T., SUM, TRIANGLE, and SINCUS. They are all good for various reasons. SUM has a very nice looking magazine format, L.I.S.T. puts in a lot of usefull technical data, TRIANGLE and SINCUS give us a lot of user news and problem solvers and ZX UNB keeps us up to date on the world news about T/S related happenings. They, and all the others that we are privileged to see each month, are a very necessary part of T/S computing. We want to here and now send our thanks to all of the people out there that work very hard each time they put out an issue. We know the time and effort involved, as we are in the same position.

It comes back to one very important problem. We are sure that the other editors out there will agree with us when we say that the BIGGEST problem is getting people to contribute to the effort. If the editor has to do the entire job, there is a point at which it all gets to be too much and then another newsletter bites the dust. We cannot afford to loose even one of these publications. We can only hope that these newsletters, and the groups for which they are printed, get as much from our small endeavor as we get from them.

Feel free to reprint what you find useful.

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# ZX/TS

## P and R

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This month we have several programs and routines for you to make use of. We hope that you find something that suits you.

These come from several people; Dennis Jurries, Jack Armstrong and Dick Wagner.

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A MC LOADER PROGRAM  
FOR T/S 1000  
Dick Wagner

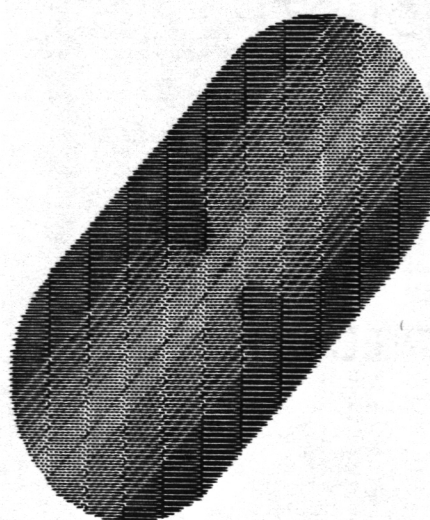
This machine language loading program for loading REM lines is used in Gordon Young's article "Build Your Own Spreadsheet" in SYNC Jan/Feb 84. The method provides for entering the MC, one at a time, into a table 6 column across, left to right. The MC number can be edited when first displayed, and then again in the table (last line only and not the 6th column). The MC listing scrolls so you have unlimited display space.

It is possible to SAVE the REM listing while in process! The LOADED MC listing (incomplete) can be continued until finished. If STOP is used before finishing any further input starts back at the beginning. Accordingly you cannot see characters going into REM until finished.

If you have a different column count than 6 then change 9935, 9940 & 9975. The M<26 assures the loops continue and when M>26 the loop stops on the 6th input. The M+5 and M-5 allows for 5 inputs of 3 characters and 2 spaces each plus the last 3 characters. See Gordon Young's article for complete details. 16514 is the address for the first byte after REM. This program is for 60 rows of data in 6 columns.

```
9900 LET N=16514
9905 LET M=0
9910 INPUT A
9915 IF A>300 THEN GOTO 9960
9920 POKE N,A
9925 PRINT AT 20,M;A
9930 LET N=N+1
9935 LET M=M+5
9940 IF M<26 THEN GOTO 9910
9945 LET M=0
9950 SCROLL
9955 GOTO 9910
9960 IF A>555 THEN GOTO 9999
9965 IF A=555 THEN GOTO 9990
9970 LET N=N+1
9975 IF M<26 THEN LET M=M-5
9980 PRINT AT 20,M;" "
9985 GOTO 9910
9990 SAVE "ASSEMBLER"
9995 GOTO 9910
9999 STOP
```

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```
20 FOR K=125 TO 50 STEP -1
30 CIRCLE K,K,50
40 NEXT K
```

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BORDERS ON THE 1000 & 2068  
Dick Wagner

Enhance your program menu with borders. To eliminate a lot of calculating for location, select the top border PRINT AT as 2 line numbers less than your menu top line and the bottom border 2 lines lower than the menu last line. The side borders may conveniently be at 1 & 30, or if you need the space, 0 & 31. Use the subroutine example for a menu format from lines 3 to 8.

```
For the 2068:
1000 FOR N=1 TO 30
1010 PRINT AT 1,N; CHR$ 131:
PRINT AT 10,N; CHR$ 140
1020 NEXT N
1030 FOR N=1 TO 10
1040 PRINT AT N,1; CHR$ 133:
PRINT AT N, 30; CHR$ 138
1050 NEXT N
```

If you are more comfortable using characters look up the character codes on page 242, 3 of the manual and substitute, bracketing the character in quotes. The particular line combination was selected so corners would fill in properly.

For the 1000:  
Change the CHR\$ as follows-131 to 3; 140 to 131; 138 to 5. Where : is use in lines 1010 and 1040 just break the lines and start with new line numbers 1015 and 1045.

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# Entering and Recalling Text in Machine Code

by Dennis Jurries

This subroutine will allow the user to enter up to 277 characters into machine code and recover them at will. The routine consists of four parts. The first part is the machine code loader program.

```
10 FOR x=55501 TO 55533
20 READ z: POKE x,z
30 NEXT x
40 DATA 62,0,205,48,18,225,70,
35,229,33,183,215,126,35,254,128,
56,250,16,248,126,35,254,128,20
0,215,24,248,201,205,205,216,1,2
01
```

RUN the above program then DELETE it. The second part consists of six lines that allow the text you input into machine code to be recovered.

```
10 FOR x=1 TO z
20 POKE 55533,x
30 RANDOMIZE USR 55530
40 PAUSE 0
50 NEXT x
60 STOP
```

The third part of the routine allows the user to put text into machine code. Once the user puts the text in and tests it then this part may be deleted.

```
100 LET z=1: LET J=55224: LET a
#=""
110 PRINT "Input text (limit 32
characters if you want to print
text on the 24th line only). Pr
ess enter when finished with t
ext."
120 PRINT
130 GO SUB 300
140 INPUT a#
150 IF LEN a#>=55500-J THEN PRI
NT AT 0,0;"Text too long. Input
text.": CLS: LET J=J-LEN a#: LE
T z=z-1: GO TO 110
160 FOR i=1 TO LEN a#
170 POKE J,CODE a$(i)
180 IF J<55500 AND i=LEN a# THE
N POKE J+1,128
190 IF J<55500 AND i=LEN a# THE
N LET J=J+1
200 IF J<55500 THEN LET J=J+1
210 NEXT i
220 LET z=z+1
230 GO SUB 400
240 LET z=z-1
250 STOP
300 PRINT "TEXT #";z;" " "277
-LEN a#;" characters remaining."
```

Use the POWER  
within your reach!



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```
310 RETURN
400 PRINT
410 PRINT "More text? (y/n)"
420 PAUSE 0
430 IF INKEY#="y" OR INKEY#="Y"
THEN CLS: GO TO 110
440 RETURN
```

The above is set up to print on the 24th line. Several different messages can be run if you add a line, 45 CLS. If you wish to print text from the top of the page then POKE 55502,2. To change back to the 24th line POKE 55502,0.

The following is the OP CODE for the machine code routine entered in part one above. This is the forth part of the sub-routine.

```
55501 LD A,0
55503 CALL 4656
55506 POP HL
55507 LD B,(HL)
55508 INC HL
55509 PUSH HL
55510 LD HL,55223
55513 LD A,(HL)
55514 INC HL
55515 CP 128
55517 JR C,55513
55519 DJNZ B,55513
55521 LD A,(HL)
55522 INC HL
55523 CP 128
55525 RET Z
55526 RST 16
55527 JR 55521
55529 RET
55530 CALL 55501
55533 01
55534 RET
```

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NOTICE

Just a quick note to let anyone interested know that Dennis Jurries will be giving a short talk on the manufacture of silicon crystal and the making of the wafers that make our computers possible. It should be very interesting. Hope to see you there.

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## ARTICLE

### GALIFREY II BBS

by  
Dennis Tomlin

The Galifrey II BBS (GAOF) has given us a special space on their fantastic BBS. Of all the local BBS, GALF offers the largest variety of services available. Best of all, IT'S FREE!!!

To access this system....  
DIAL 284-0477

No control character is needed to LOGON, simply follow the prompts.

To list all of the services available on this system would take too long, so all I want to say is LOGON and HAVEFUN exploring this BBS.

Oh, by the way, be sure to thank the SYSOP for giving us T/S USERS our own "Room".

## \*\*\*\*\* HARDWARE REVIEW \*\*\*\*\*

ZEBRA JOYSTICK ADAPTER  
DICK WAGNER

The joystick adapter plugs into the rear port of the TS 1000 computer. This provides a 9 pin jack for standard ON-OFF type joysticks like BOSS and ATARI. It also extends the computer port. The device is small and provides the stick connection on the left side.

A short machine code program is provided to add to programs as USR 16514 runs the control. USR 16514 is direct program substitution for INKREY\$ as in:  
1000 IF USR 16514=4 GO TO xxxx  
The number to make USR equal to will be 1,2,4, or 8. This is the same system used on the 2068 as 1=UP, 2=DOWN, 4=LEFT & 8=RIGHT, and add 16 for FIRE. If your program uses diagonals add 5, 6, 9, & 10 where these numbers are the sums of the adjacent points.

The easiest program method uses 1 REM to store the machine code. If you are shakey on this the pamphlet takes you thru it. This is also a step toward using MC.

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## SOFTWARE REVIEW

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I thought it would be a good idea to give my evaluation of a program I ordered from Alan Pattison of Olympia, WA. The name of the program is MONEY MANAGER.

It is what I beleive to be an excellent program for keeping household records or a small business. I have been using the 1000 version for about two years now and have been very pleased with it.

This program and other programs are availabl on tape with full instructions from Alan for the total price of \$9.00 for the 1000 or the 2068.

Alan has been most helpfull to me in answering any questions I had, all he asks is that you send a SASE with your inquiry.

MONEY MANAGER lets you enter the number of incomes and expenses you want and to give them the titles you want, like FOOD-RENT-PGE-MISC and SALARY-GIFTS-DIVIDENDS or any name you wish to give them. It is pre-programed for SAVINGS BAL., CHECKING BAL., STOCKS, MISC. ASSETS, MORTGAGE.

I feel it is a very useful program for keeping a running account of your household budget item by item.

With this program you can at anytime see just what has been spent on any item or what source your income and how much it was.

It has the ability to SAVE by each month and auto VERIFY.

For my wants and needs it is an excellent program.

BOB EVANS

ALAN PATTISON  
3422 FRENCH LOOP NW  
OLYMPIA, WA 98502  
Ph. (206) 866-1492

## \*\*\*\*\* HARDWARE REVIEW

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-A&J MICRO DRIVE-  
DICK WAGNER

A bit of experimenting with this interesting device for the 2068 computer has brought out several operating ideas that may tempt some of the readers to try their own investigating when they get this add-on.



How do you know where the tape beginning is when it is endless? After formatting as per instructions the device is at the splice end. For getting started enter a short program like 1 REM and SAVE "@1,-". This wastes 1 file but there are 8 left. Now every loop of the tape will display @- and you can keep tabs on the tape. As programs are added you can pick up @- and learn how the file works.

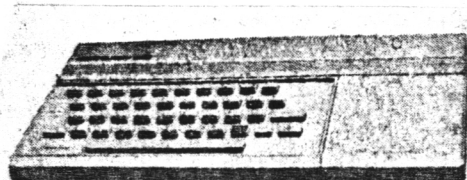
Before starting a program or loading from regular tape just use LOAD"@-" and position the tape at program 1, which is 1 REM. Now a SAVE will start at the end of the highest file number in MICRO DRIVE by skipping over lower numbers. The files in between 1 and your number will be passed over but not erased. File names will be displayed.

Because each tape must be formatted before use it seems advisable to do this to all before getting started. Using my example of @- as file 1, note this on each microwafer so you will know they are ready to use. Also, if you remove the microwafer after adding the little 1 REM program, the tape is positioned for the next SAVE so it doesn't need to make a full pass. Likewise by using the same system, LOAD "@-", before removing the wafer each time, you are ready to call a particular program with the least amount of running time.

Note that there is a dust shield on each wafer at the inserting edge. This must be at the most left or closed position to permit insertion into the loading slot. This shield is forced to the closed position as the wafer is withdrawn.

By now you will realise that the MICRODRIVE is very different from our cassette players. How about speed? The manual says 10 times faster. There are 5 sizes of wafer capacities, ranging from 14K to 85K. Looping time varies from 12 to 75 seconds. This averages to about 1195 byte of file per second! My test was 1267 bytes.

Short wafers would be preferred as many times a full loop will be required to access a desired file, and add to this the file length. Using my implanted 1 REM program, you are less than 1 second away from the tape beginning point.



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## CLASSIFIED ADS

# =====

CURRY COMPUTER  
5344 W. BANFF LN.  
GLENDALE, AZ 85306  
1-602-978-2902  
MCI # 126-7701

### 1000/1500

All QUICKSILVA Titles	5.00
TIMEX Brand Titles	4.50
RocketMan or FortyNiner	10.95
FileSixty Keyboard	12.95
MINDWARE Printer	29.95+
1500 Computer	74.95+

### 2068

Checkbook Mgr	8.95
State + Caps Cart.	9.95
Casino I Cart.	9.95
All QUICKSILVA	18.95
Full Line of SHARPS	20.95
Full Line of TEXTWRITERS	
Tasword II	49.95
Tasprint	19.95
Masterfile	24.95
ROM Switch	56.95-
L2000 String. Floppy	199.50+

### MISC.

2040 Printer	69.95+
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2050 Modem	119.95+
Compuserve Kit	29.95-

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D. Thompsons Decathlon	15.95
Deus Ex Machina	25.95/

### QL BOOKS#

Intro. the Sinclair QL	10.95
Intro. SuperBASIC on QL	10.95
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QL Games Compendium	12.95

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## A GOOD ONE!

I must say a few words about one of the newer T/S suppliers on the scene. The Plotter has a column that lets us know if a vendor does not treat us well. It must also let us know if there are exceptionally good vendors out there.

You may have read in this newsletter about the problems we were having with a company called RESEARCH SERVICE LABS of Oklahoma City, OK. We had ordered an EPROM PROGRAMMER from them and they had left out a lot of info that would have made our decision as to whether or not to order the unit in the first place easier.

I would like to report here and now, that this is one company that is really serious about serving the T/S Users everywhere. After a couple of exchanges of letters I decided to cancel all of the products that I had ordered, a total of \$245 worth. After sending the Eprommer back to them, I waited for my refund. After three weeks I received a box that was the same as the one that I had shipped back to them. I was all set to be upset with them until I opened the box and found not only the refund that I had requested, but also a printer I/F at no cost! You can imagine how suprised I was and still am!

I can only say that in the event that I needed any of the product line that this company sells, I would not hesitate to order from them. I beleive that they are really trying. These are the kind of ppeople that we MUST support. If we do not, what is to encourage other prospective suppliers and producers to continue to support us? *Paul Brown*

\*\*\*\*\*



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(((((

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